

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application. Please cancel claims 4, 7, 19, 27, 30, 42, and 49. Please amend claims 1, 6, 13, 24, 29, 36, and 47, as follows:

Listing of Claims:

1. (Currently Amended) A computer implemented method for scheduling splittable work orders to provide customers with requested service, the method comprising:

forming a list of appointment windows for days on which service may be performed, including dividing a service area into a number of work areas, assigning a field service representative to each work area where each field service representative has an associated skill level, assigning at least one skill level to each work area, and assigning at least one window hierarchy to each work area, each window hierarchy associated with at least one skill level assigned to the work area and having an all day appointment window, aggregate appointment windows, and contiguous basic appointment windows, at least a portion of basic appointment windows grouped into aggregate appointment windows, and aggregate appointment windows and remaining basic appointment windows grouped into the all day appointment window;

identifying a request for service from a customer as being a splittable work order;

assigning to the splittable work order a job duration required to complete the order and a split time that is less than the job duration;

determining an appointment window on a first day during which a portion of the service to complete the work order may be scheduled, the appointment window being for the split time in duration;

determining at least one appointment window on a subsequent day or days during which the remainder of the service to complete the work order may be scheduled;

for each operation of determining, determining whether a booking pattern is associated with the order and determining appointment windows as a function of any associated booking patterns, the booking patterns having respective working periods, in response to a splittable work order booking the amount of time for the splittable work order in a window partially overlapping a working period proportionally to the amount of overlap between the partially overlapping window and the working period; and

scheduling the splittable work order by assigning the work order to the determined appointment windows on the first day and subsequent day or days.

2- 4. (Canceled)

5. (Original) The method of claim 1 wherein each booking pattern each booking pattern specifies particular days and times on such days during which service may be performed.

6. (Currently Amended) A computer implemented method for scheduling splittable work orders to provide customers with requested service, the method comprising:

receiving customer requests from customers desiring service;

identifying a received request for service from a customer as being a splittable work order having a job duration required to complete the splittable work order over a plurality of different days and a split time that is less than the job duration;

requesting an appointment in a specific appointment window on a first day in response to the received customer request, the appointment window being for the split time;

validating the requested appointment against a number of scheduling constraints and against projected service resources for that window on the first day, including dividing a service area into a number of work areas, assigning a field service representative to each work area where each field service representative has an associated skill level, assigning at least one skill level to each work area, and assigning at least one window hierarchy to each work area, each window hierarchy corresponding to a set of appointment windows and associated with at least one skill level assigned to the work area, the scheduling constraints having allowable appointment windows during which appointments are permitted to be scheduled;

scheduling the appointment in the specific appointment window on the first day when the validation indicates the appointment can be scheduled given the scheduling constraints and projected service resources, in response to the specific appointment window overlapping the allowable appointment window, time for the appointment scheduled in the specific appointment window proportionally to the amount of overlap between the specific appointment window and the allowable appointment window;

requesting an appointment in a specific appointment window on a subsequent day or days during which the remainder of the splittable work order may be scheduled;

validating the requested appointment against the number of scheduling constraints and against projected service resources for that window on the subsequent day or days;

scheduling the appointment in the specific appointment window on the subsequent day or days when the validation indicates the appointment can be scheduled given the scheduling constraints and projected service resources; and
advising the customer of the scheduled appointment.

7. (Canceled)

8. (Original) The method of claim 6 wherein the projected service resources comprise projected resources of field service representatives on the requested day and during the requested window.

9. (Canceled)

10. (Previously presented) The method of claim 6 wherein each window hierarchy comprises all day appointment windows, aggregate appointment windows, and basic appointment windows.

11. (Original) The method of claim 6 wherein receiving customer requests from customers desiring service comprises receiving telephone calls by customer service representatives of the company providing the service.

12. (Original) The method of claim 11 wherein advising the customer of the scheduled appointment comprises advising the customer over the telephone as part of the same telephone call initially received by the customer service representative.

13. (Currently Amended) A computer implemented method for scheduling splittable work orders to provide customers with requested service, the method comprising:
receiving customer requests from customers desiring service, the requests being received by customer service representatives;

identifying a received request for service from a customer as being a splittable work order having a job duration required to complete the splittable work order over a plurality of different days and a split time that is less than the job duration;

requesting an appointment in a specific appointment window on a first day in response to the received customer request, the appointment window being for the split time;

validating the requested appointment against a number of scheduling constraints and against projected service resources for that window on the first day, including dividing a service area into a number of work areas, assigning a field service representative to each work area where each field service representative has an associated skill level, assigning at least one skill level to each work area, and assigning at least one window hierarchy to each work area, each window hierarchy corresponding to a set of appointment windows and associated with at least one skill level assigned to the work area, the scheduling constraints having allowable appointment windows during which appointments are permitted to be scheduled;

scheduling the appointment in the specific appointment window on the first day when the validation indicates the appointment can be scheduled given the scheduling constraints and projected service resources, in response to the specific appointment window overlapping the allowable appointment window, time for the appointment scheduled in the specific appointment window proportionally to the amount of overlap between the specific appointment window and the allowable appointment window;

requesting an appointment in a specific appointment window on a subsequent day or days during which the remainder of the splittable work order may be scheduled;

validating the requested appointment against the number of scheduling constraints and against projected service resources for that window on the subsequent day or days;

scheduling the appointment in the specific appointment window on the subsequent day or days when the validation indicates the appointment can be scheduled given the scheduling constraints and projected service resources, time for the appointment in a window partially overlapping a working period of the scheduling constraints scheduled proportionally to the amount of overlap between the partially overlapping window and the working period;

advising the customer of the scheduled appointment by the customer service representative; and

if either validation fails,

providing the customer service representative with a set of alternate appointment windows over multiple days in which the splittable work order may be scheduled; and

advising the customer of the alternative appointment windows.

14. (Original) The method of claim 13 wherein providing the customer service representative with a set of alternate appointment windows over multiple days in which the splittable work order may be scheduled includes informing the customer service representative of the reason either validation failed.

15. (Original) The method of claim 14 wherein informing the customer service representative of the reason either or both validations failed includes providing the customer service representative with an indication that the reason for the failure was the result of insufficient projected service resources.

16. (Original) The method of claim 15 wherein providing the customer service representative with an indication that the reason for the failure was the result of insufficient projected service resources includes providing the representative with the degree to which the requested appointment windows are overbooked.

17. (Original) The method of claim 16 wherein the customer service representative schedules the requested appointment in the alternative appointment windows or schedules the appointment in the originally requested windows using an override procedure.

18. (Original) The method of claim 13 wherein the customer service representative requests a list of all available appointment windows into which the splittable work order may be scheduled when either validation failed, and the representative schedules the order into one of the available windows.

19. (Canceled)

20. (Original) The method of claim 13 wherein the projected service resources comprise projected resources of field service representatives on the requested day and during the requested window.

21. (Canceled)

22. (Previously Presented) The method of claim 13 wherein each window hierarchy comprises all day appointment windows, aggregate appointment windows, and basic appointment windows.

23. (Original) The method of claim 13 wherein advising the customer of the scheduled appointment comprises advising the customer over the telephone as part of the same telephone call initially received by the customer service representative.

24. (Currently Amended) A computer-readable medium containing a program for scheduling splittable work orders to provide customers with requested service, the program scheduling the work orders by performing operations comprising:

forming a list of appointment windows for days on which service may be performed, including dividing a service area into a number of work areas, assigning a field service representative to each work area where each field service representative has an associated skill level, assigning at least one skill level to each work area, and assigning at least one window hierarchy to each work area, each window hierarchy associated with at least one skill level assigned to the work area and having an all day appointment window, aggregate appointment windows, and contiguous basic appointment windows, at least a portion of basic appointment windows grouped into aggregate appointment windows, and aggregate appointment windows and remaining basic appointment windows grouped into the all day appointment window;

identifying a request for service from a customer as being a splittable work order;

assigning to the splittable work order a job duration required to complete the order and a split time that is less than the job duration;

determining an appointment window on a first day during which a portion of the service to complete the work order may be scheduled, the appointment window being for the split time in duration;

determining at least one appointment window on a subsequent day or days during which the remainder of the service to complete the work order may be scheduled;

for each operation of determining, determining whether a booking pattern is associated with the order and determining appointment windows as a function of any associated booking patterns, the booking patterns having respective working periods, in response to a splittable work order booking the amount of time for the splittable work order in a window partially overlapping a working period proportionally to the amount of overlap between the partially overlapping window and the working period; and

scheduling the splittable work order by assigning the work order to the determined appointment windows on the first day and subsequent day or days.

25-27. (Canceled)

28. (Original) The computer-readable medium of claim 24 wherein each booking pattern each booking pattern specifies particular days and times on such days during which service may be performed.

29. (Currently Amended) A computer-readable medium containing a program for scheduling splittable work orders to provide customers with requested service, the program scheduling the work orders by performing operations comprising:

receiving customer requests from customers desiring service;

identifying a received request for service from a customer as being a splittable work order having a job duration required to complete the splittable work order over a plurality of different days and a split time that is less than the job duration;

requesting an appointment in a specific appointment window on a first day in response to the received customer request, the appointment window being for the split time;

validating the requested appointment against a number of scheduling constraints and against projected service resources for that window on the first day, including dividing a service area into a number of work areas, assigning a field service representative to each work area where each field service representative has an associated skill level, assigning at least one skill level to each work area, and assigning at least one window hierarchy to each work area, each window hierarchy corresponding to a set of appointment windows and associated with at least one skill level assigned to the work area, the scheduling constraints having allowable appointment windows during which appointments are permitted to be scheduled;

scheduling the appointment in the specific appointment window on the first day when the validation indicates the appointment can be scheduled given the scheduling constraints and projected service resources, in response to the specific appointment window overlapping the allowable appointment window, time for the appointment scheduled in the specific appointment window proportionally to the amount of overlap between the specific appointment window and the allowable appointment window;

requesting an appointment in a specific appointment window on a subsequent day or days during which the remainder of the splittable work order may be scheduled;

validating the requested appointment against the number of scheduling constraints and against projected service resources for that window on the subsequent day or days;

scheduling the appointment in the specific appointment window on the subsequent day or days when the validation indicates the appointment can be scheduled given the scheduling constraints and projected service resources; and

advising the customer of the scheduled appointment.

30. (Canceled)

31. (Original) The computer-readable medium of claim 29 wherein the projected service resources comprise projected resources of field service representatives on the requested day and during the requested window.

32. (Canceled)

33. (Previously Presented) The computer-readable medium of claim 29 wherein each window hierarchy comprises all day appointment windows, aggregate appointment windows, and basic appointment windows.

34. (Original) The computer-readable medium of claim 29 wherein receiving customer requests from customers desiring service comprises receiving telephone calls by customer service representatives of the company providing the service.

35. (Original) The computer-readable medium of claim 34 wherein advising the customer of the scheduled appointment comprises advising the customer over the telephone as part of the same telephone call initially received by the customer service representative.

36. (Currently Amended) A computer-readable medium containing a program for scheduling splittable work orders to provide customers with requested service, the program scheduling the work orders by performing operations comprising:

receiving customer requests from customers desiring service, the requests being received by customer service representatives;

identifying a received request for service from a customer as being a splittable work order having a job duration required to complete the splittable work order over a plurality of different days and a split time that is less than the job duration;

requesting an appointment in a specific appointment window on a first day in response to the received customer request, the appointment window being for the split time;

validating the requested appointment against a number of scheduling constraints and against projected service resources for that window on the first day, including dividing a service area into a number of work areas, assigning a field service representative to each work area where each field service representative has an associated skill level, assigning at least one

skill level to each work area, and assigning at least one window hierarchy to each work area, each window hierarchy corresponding to a set of appointment windows and associated with at least one respective skill level assigned to the work area, the scheduling constraints having allowable appointment windows during which appointments are permitted to be scheduled;

scheduling the appointment in the specific appointment window on the first day when the validation indicates the appointment can be scheduled given the scheduling constraints and projected service resources, in response to the specific appointment window overlapping the allowable appointment window, time for the appointment scheduled in the specific appointment window proportionally to the amount of overlap between the specific appointment window and the allowable appointment window;

requesting an appointment in a specific appointment window on a subsequent day or days during which the remainder of the splittable work order may be scheduled;

validating the requested appointment against the number of scheduling constraints and against projected service resources for that window on the subsequent day or days;

scheduling the appointment in the specific appointment window on the subsequent day or days when the validation indicates the appointment can be scheduled given the scheduling constraints and projected service resources;

advising the customer of the scheduled appointment by the customer service representative; and

if either validation fails,

providing the customer service representative with a set of alternate appointment windows over multiple days in which the splittable work order may be scheduled; and

advising the customer of the alternative appointment windows.

37. (Original) The computer-readable medium of claim 36 wherein providing the customer service representative with a set of alternate appointment windows over multiple days in which the splittable work order may be scheduled includes informing the customer service representative of the reason either validation failed.

38. (Original) The computer-readable medium of claim 37 wherein informing the customer service representative of the reason either or both validations failed includes providing the customer service representative with an indication that the reason for the failure was the result of insufficient projected service resources.

39. (Original) The computer-readable medium of claim 38 wherein providing the customer service representative with an indication that the reason for the failure was the result of insufficient projected service resources includes providing the representative with the degree to which the requested appointment windows are overbooked.

40. (Original) The computer-readable medium of claim 39 wherein the customer service representative schedules the requested appointment in the alternative appointment windows or schedules the appointment in the originally requested windows using an override procedure.

41. (Original) The computer-readable medium of claim 36 wherein the customer service representative requests a list of all available appointment windows into which the splittable work order may be scheduled when either validation failed, and the representative schedules the order into one of the available windows.

42. (Canceled)

43. (Original) The computer-readable medium of claim 36 wherein the projected service resources comprise projected resources of field service representatives on the requested day and during the requested window.

44. (Canceled)

45. (Previously presented) The computer-readable medium of claim 36 wherein each window hierarchy comprises all day appointment windows, aggregate appointment windows, and basic appointment windows.

46. (Original) The computer-readable medium of claim 36 wherein advising the customer of the scheduled appointment comprises advising the customer over the telephone as part of the same telephone call initially received by the customer service representative.

47. (Currently Amended) A server computer system for scheduling splittable work orders, the system comprising an order scheduling component adapted to receive requests for scheduling splittable work orders from client computer systems, the scheduling component being operable to divide a service area into a number of work areas, assign a field service

representative to each work area where each field service representative has an associated skill level, assign at least one skill level to each work area, and assign at least one window hierarchy to each work area, each window hierarchy associated with at least one skill level assigned to the work area and having an all day appointment window, aggregate appointment windows, and contiguous basic appointment windows, at least a portion of basic appointment windows grouped into aggregate appointment windows, and aggregate appointment windows and remaining basic appointment windows grouped into the all day appointment window, the scheduling component further operable responsive to a client computer initiating a request to schedule a splittable work order to assign to the splittable work order a job duration required to complete the order and a split time that is less than the job duration, determine an appointment window on a first day during which a portion of the service to complete the work order may be scheduled, the appointment window being for the split time in duration, determine at least one appointment window on a subsequent day or days during which the remainder of the service to complete the work order may be scheduled, and schedule the splittable work order by assigning the work order to the determined appointment windows on the first day and subsequent day or days, the scheduling component communicating to the client computer initiating the request information about the scheduled work order, the scheduling component includes a system tables component having booking constraints against which the requested orders are scheduled, the scheduling component further operable to determine appointment windows as a function of any associated booking constraints, the booking constraints having respective working periods, in response to a splittable work order, booking the amount of time for the splittable work order in a window partially overlapping a working period proportionally to the amount of overlap between the partially overlapping window and the working period.

48. (Original) The server computer system of claim 47 wherein requests initiated from the client computers and information about the scheduled work order are formulated into message packets adapted to be communicated over a communications network including the Internet.

49. (Canceled)

50. (Original) The server computer system of claim 47 wherein the scheduling component includes a remote access component that provides a manager remote access to the scheduling component.